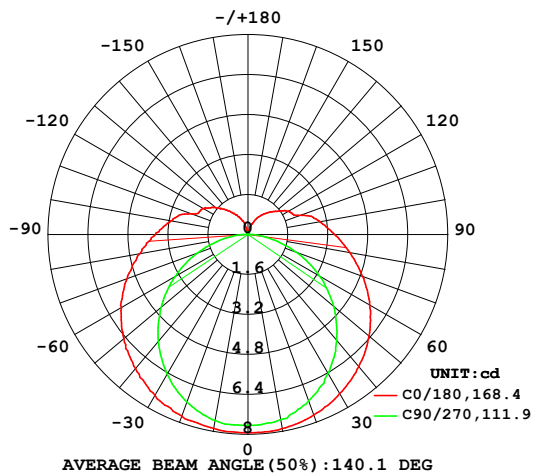


## LUMINAIRE PHOTOMETRIC TEST REPORT

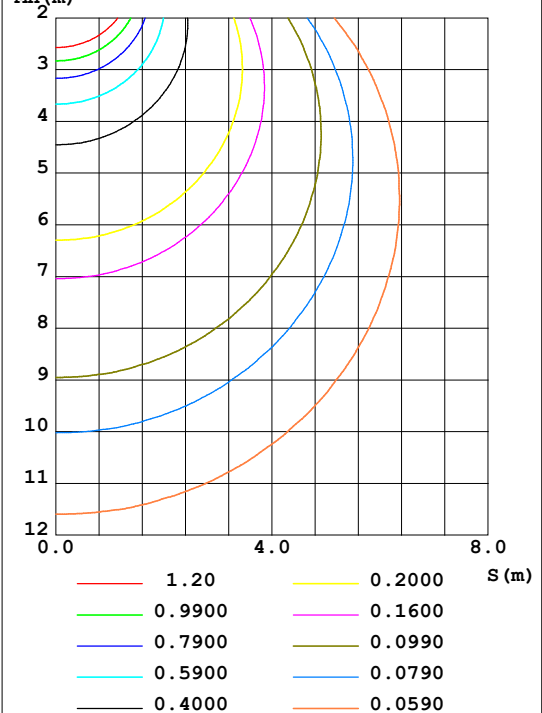
|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.3520A P:8.400W PF:1.000 Freq:0Hz Lamp Flux:35.3238x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0Y24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |

| DATA OF LAMP      |         | PHOTOMETRIC DATA      |         |                    |          | Eff: 4.21 lm/W |
|-------------------|---------|-----------------------|---------|--------------------|----------|----------------|
| MODEL             | NNS1224 | I <sub>max</sub> (cd) | 7.931   | S/MH (C0/180)      | 1.41     |                |
| NOMINAL POWER (W) | 8       | LOR (%)               | 100.0   | S/MH (C90/270)     | 1.26     |                |
| RATED VOLTAGE (V) | 24      | TOTAL FLUX (lm)       | 35.324  | h UP,DN (C0-180)   | 8.6,40.5 |                |
| NOMINAL FLUX (lm) | 35.3238 | CIE CLASS             | SEMI-D. | h UP,DN (C180-360) | 9.3,41.6 |                |
| LAMPS INSIDE      | 1       | h up (%)              | 17.9    | CIBSE SHR NOM      | 1.50     |                |
| TEST VOLTAGE (V)  | 24      | h down (%)            | 82.1    | CIBSE SHR MAX      | 1.50     |                |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: COLORS  
Test Date: 2019-07-01

g Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 10.750m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

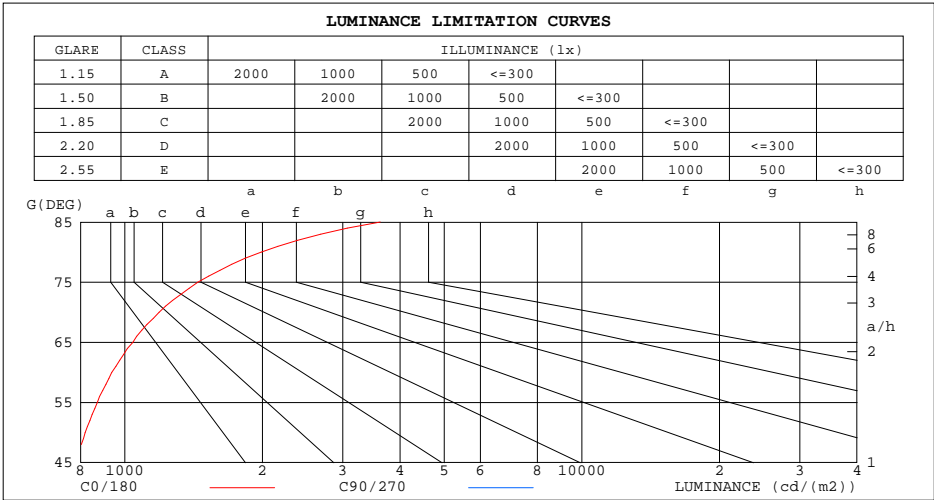
| g   | C0                    | C90    | C180   | C270   |  |  |  |  | g       | F zone  | F total | %lum,lamp |
|-----|-----------------------|--------|--------|--------|--|--|--|--|---------|---------|---------|-----------|
| 10  | 7.881                 | 7.519  | 7.886  | 7.552  |  |  |  |  | 0~ 10   | 0.7405  | 0.7405  | 2.1,2.1   |
| 20  | 7.688                 | 7.087  | 7.737  | 7.140  |  |  |  |  | 10~ 20  | 2.146   | 2.886   | 8.17,8.17 |
| 30  | 7.346                 | 6.425  | 7.447  | 6.460  |  |  |  |  | 20~ 30  | 3.319   | 6.205   | 17.6,17.6 |
| 40  | 6.902                 | 5.517  | 7.004  | 5.582  |  |  |  |  | 30~ 40  | 4.137   | 10.34   | 29.3,29.3 |
| 50  | 6.317                 | 4.490  | 6.489  | 4.540  |  |  |  |  | 40~ 50  | 4.534   | 14.88   | 42.1,42.1 |
| 60  | 5.622                 | 3.293  | 5.852  | 3.381  |  |  |  |  | 50~ 60  | 4.484   | 19.36   | 54.8,54.8 |
| 70  | 4.876                 | 2.034  | 5.143  | 2.120  |  |  |  |  | 60~ 70  | 4.019   | 23.38   | 66.2,66.2 |
| 80  | 4.141                 | 0.8481 | 4.388  | 0.9469 |  |  |  |  | 70~ 80  | 3.228   | 26.61   | 75.3,75.3 |
| 90  | 3.477                 | 0.0964 | 3.702  | 0.2066 |  |  |  |  | 80~ 90  | 2.391   | 29.00   | 82.1,82.1 |
| 100 | 2.936                 | 0.0259 | 3.147  | 0.0129 |  |  |  |  | 90~100  | 1.838   | 30.84   | 87.3,87.3 |
| 110 | 2.279                 | 0.0386 | 2.435  | 0.0129 |  |  |  |  | 100~110 | 1.473   | 32.31   | 91.5,91.5 |
| 120 | 1.880                 | 0.0517 | 2.085  | 0.0129 |  |  |  |  | 110~120 | 1.053   | 33.36   | 94.5,94.5 |
| 130 | 1.455                 | 0.0644 | 1.647  | 0.0129 |  |  |  |  | 120~130 | 0.8130  | 34.18   | 96.8,96.8 |
| 140 | 1.115                 | 0.0774 | 1.229  | 0.0644 |  |  |  |  | 130~140 | 0.5522  | 34.73   | 98.3,98.3 |
| 150 | 0.7860                | 0.1094 | 0.9181 | 0.0966 |  |  |  |  | 140~150 | 0.3470  | 35.08   | 99.3,99.3 |
| 160 | 0.4378                | 0.1118 | 0.5840 | 0.1075 |  |  |  |  | 150~160 | 0.1788  | 35.25   | 99.8,99.8 |
| 170 | 0.1288                | 0.1142 | 0.1544 | 0.1049 |  |  |  |  | 160~170 | 0.0576  | 35.31   | 100,100   |
| 180 | 0.1159                | 0.1159 | 0.1094 | 0.1030 |  |  |  |  | 170~180 | 0.0113  | 35.32   | 100,100   |
| DEG | LUMINOUS INTENSITY:cd |        |        |        |  |  |  |  |         | UNIT:lm |         |           |

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.3520A P:8.400W PF:1.000 Freq:0Hz Lamp Flux:35.3238x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0Y24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G(180)            | C0/180 | C90/270 |
| 85                | 3621   | 363     |
| 80                | 1987   | 407     |
| 75                | 1445   | 451     |
| 70                | 1188   | 496     |
| 65                | 1041   | 528     |
| 60                | 937    | 549     |
| 55                | 871    | 566     |
| 50                | 819    | 582     |
| 45                | 781    | 590     |

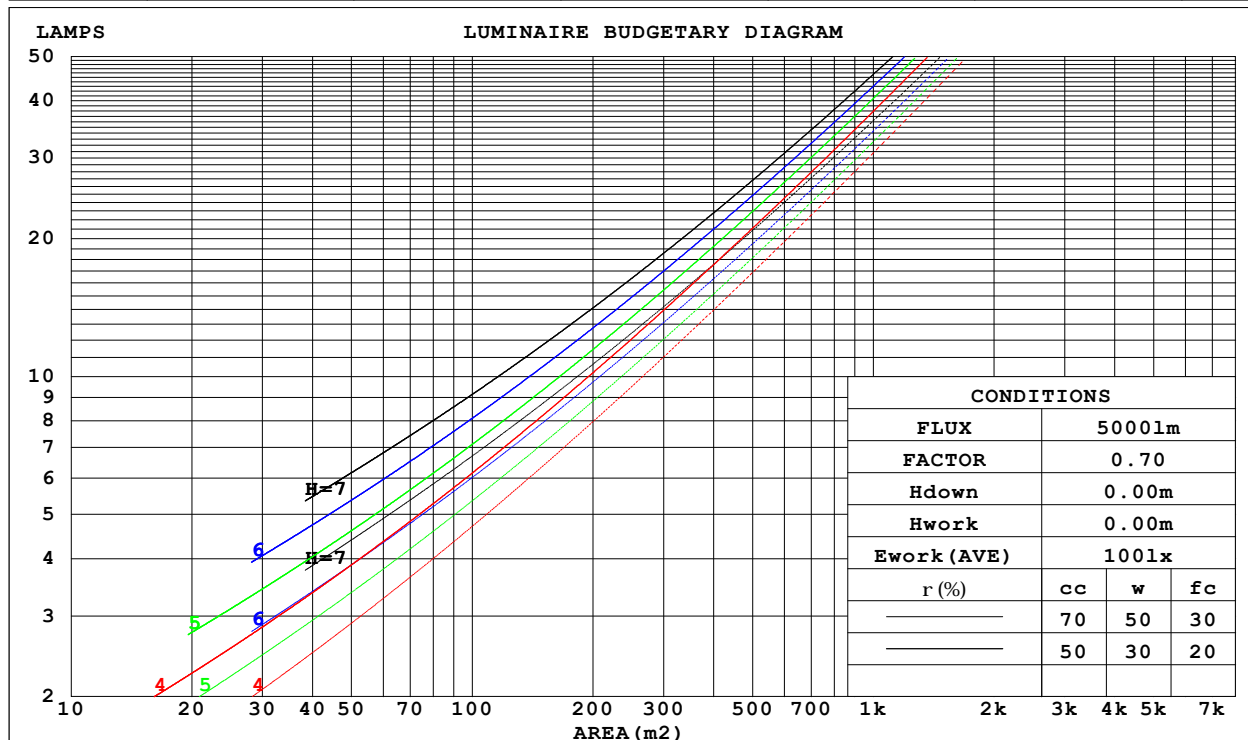
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.3520A P:8.400W PF:1.000 Freq:0Hz Lamp Flux:35.3238x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0Y24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |

| r <sub>cc</sub> | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30% |     |     | 10% |     |     | 0   |
|-----------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|-----|-----|-----|-----|-----|-----|-----|
| r <sub>w</sub>  | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50% | 30% | 10% | 50% | 30% | 10% | 0   |
| r <sub>fc</sub> | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20% |     |     | 20% |     |     | 0   |
| RCR             | RCR:Room Cavity Ratio |      |      |      |      |      | Coefficients of Utilization(CU) |      |      |     |     |     |     |     |     |     |
| 0.0             | 1.15                  | 1.15 | 1.15 | 1.10 | 1.10 | 1.10 | 1.01                            | 1.01 | 1.01 | .93 | .93 | .93 | .86 | .86 | .86 | .82 |
| 1.0             | .96                   | .91  | .86  | .92  | .87  | .83  | .84                             | .81  | .77  | .77 | .74 | .72 | .71 | .69 | .66 | .63 |
| 2.0             | .82                   | .75  | .68  | .79  | .72  | .66  | .72                             | .67  | .62  | .66 | .62 | .58 | .61 | .57 | .54 | .50 |
| 3.0             | .71                   | .63  | .55  | .68  | .60  | .54  | .63                             | .56  | .50  | .58 | .52 | .47 | .53 | .48 | .44 | .41 |
| 4.0             | .63                   | .53  | .46  | .60  | .52  | .45  | .55                             | .48  | .42  | .51 | .45 | .40 | .47 | .42 | .37 | .35 |
| 5.0             | .56                   | .46  | .39  | .53  | .45  | .38  | .49                             | .42  | .36  | .45 | .39 | .34 | .42 | .36 | .32 | .29 |
| 6.0             | .50                   | .41  | .34  | .48  | .39  | .33  | .44                             | .37  | .31  | .41 | .34 | .30 | .38 | .32 | .28 | .25 |
| 7.0             | .45                   | .36  | .30  | .43  | .35  | .29  | .40                             | .33  | .27  | .37 | .31 | .26 | .34 | .29 | .25 | .22 |
| 8.0             | .41                   | .32  | .26  | .39  | .31  | .26  | .37                             | .29  | .24  | .34 | .28 | .23 | .31 | .26 | .22 | .20 |
| 9.0             | .37                   | .29  | .23  | .36  | .28  | .23  | .34                             | .27  | .22  | .31 | .25 | .21 | .29 | .24 | .20 | .18 |
| 10.0            | .34                   | .26  | .21  | .33  | .26  | .21  | .31                             | .24  | .20  | .29 | .23 | .19 | .27 | .22 | .18 | .16 |



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:

## WEC AND CCEC

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.3520A P:8.400W PF:1.000 Freq:0Hz Lamp Flux:35.3238x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0Y24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |

|      |                       |      |      |                                  |      |      |      |      |      |      |      |      |      |      |      |   |
|------|-----------------------|------|------|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|---|
| rcc  | 80%                   |      |      | 70%                              |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0 |
| rw   | 50%                   | 30%  | 10%  | 50%                              | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| rfc  | 20%                   |      |      | 20%                              |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      | Wall Exitance Coefficients (WEC) |      |      |      |      |      |      |      |      |      |      |      |   |
| 0.0  |                       |      |      |                                  |      |      |      |      |      |      |      |      |      |      |      |   |
| 1.0  | .376                  | .214 | .068 | .364                             | .207 | .066 | .340 | .195 | .062 | .318 | .183 | .059 | .298 | .173 | .056 |   |
| 2.0  | .328                  | .180 | .055 | .317                             | .175 | .054 | .295 | .164 | .051 | .276 | .155 | .048 | .257 | .146 | .046 |   |
| 3.0  | .293                  | .156 | .047 | .283                             | .151 | .046 | .263 | .143 | .043 | .245 | .134 | .041 | .229 | .127 | .039 |   |
| 4.0  | .264                  | .137 | .040 | .255                             | .133 | .039 | .237 | .126 | .038 | .221 | .119 | .036 | .206 | .112 | .034 |   |
| 5.0  | .241                  | .123 | .036 | .232                             | .119 | .035 | .216 | .113 | .033 | .201 | .106 | .032 | .188 | .100 | .030 |   |
| 6.0  | .221                  | .111 | .032 | .213                             | .108 | .031 | .199 | .102 | .030 | .185 | .096 | .028 | .172 | .091 | .027 |   |
| 7.0  | .204                  | .101 | .029 | .197                             | .098 | .028 | .183 | .093 | .027 | .171 | .088 | .026 | .159 | .083 | .024 |   |
| 8.0  | .189                  | .092 | .026 | .183                             | .090 | .025 | .171 | .085 | .024 | .159 | .081 | .023 | .148 | .076 | .022 |   |
| 9.0  | .176                  | .085 | .024 | .170                             | .083 | .023 | .159 | .079 | .022 | .149 | .074 | .021 | .139 | .070 | .020 |   |
| 10.0 | .165                  | .079 | .022 | .160                             | .077 | .022 | .149 | .073 | .021 | .139 | .069 | .020 | .130 | .065 | .019 |   |

|      |                       |      |      |  |      |      |      |      |      |      |      |      |      |      |      |   |
|------|-----------------------|------|------|--|------|------|------|------|------|------|------|------|------|------|------|---|
| rcc  | 80%                   |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0 |
| rw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| rfc  | 20%                   |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |      |      |      |   |
| 0.0  | .327                  | .327 | .327 | .279                                       | .279 | .279 | .191 | .191 | .191 | .110 | .110 | .110 | .035 | .035 | .035 |   |
| 1.0  | .322                  | .293 | .267 | .276                                       | .252 | .229 | .189 | .173 | .159 | .109 | .100 | .092 | .035 | .032 | .030 |   |
| 2.0  | .316                  | .270 | .232 | .270                                       | .233 | .201 | .185 | .161 | .140 | .107 | .094 | .082 | .034 | .030 | .027 |   |
| 3.0  | .308                  | .254 | .210 | .264                                       | .219 | .182 | .181 | .152 | .128 | .105 | .089 | .075 | .034 | .029 | .025 |   |
| 4.0  | .300                  | .241 | .196 | .258                                       | .208 | .170 | .177 | .145 | .120 | .103 | .085 | .071 | .033 | .028 | .023 |   |
| 5.0  | .293                  | .231 | .186 | .251                                       | .200 | .162 | .173 | .140 | .114 | .100 | .082 | .068 | .032 | .027 | .022 |   |
| 6.0  | .285                  | .223 | .179 | .245                                       | .193 | .156 | .169 | .135 | .110 | .098 | .080 | .065 | .032 | .026 | .022 |   |
| 7.0  | .278                  | .217 | .174 | .239                                       | .188 | .151 | .165 | .132 | .107 | .096 | .078 | .064 | .031 | .025 | .021 |   |
| 8.0  | .272                  | .211 | .170 | .234                                       | .183 | .148 | .162 | .129 | .105 | .094 | .076 | .063 | .030 | .025 | .021 |   |
| 9.0  | .265                  | .206 | .166 | .229                                       | .179 | .145 | .158 | .126 | .103 | .092 | .074 | .061 | .030 | .024 | .020 |   |
| 10.0 | .260                  | .202 | .164 | .224                                       | .176 | .143 | .155 | .124 | .102 | .091 | .073 | .061 | .029 | .024 | .020 |   |

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

|   |                  |      |      |      |                    |                |      |                  |      |      |
|---|------------------|------|------|------|--------------------|----------------|------|------------------|------|------|
| Test:U:24.00V I:0.3520A P:8.400W PF:1.000 Freq:0Hz Lamp Flux:35.3238x1 lm |                  |      |      |      |                    |                |      |                  |      |      |
| NAME: NNS1224   |                  |      |      |      | TYPE:              |                |      | WEIGHT:          |      |      |
| SPEC.:NNS1224-0Y24CSS050CC0100  |                  |      |      |      | DIM.: 1000*12*24mm |                |      | SERIAL No.:      |      |      |
| MFR.: Colors  |                  |      |      |      | SUR.:1000*12       |                |      | Shielding Angle: |      |      |
| ceiling/cavity  | 0.7              | 0.7  | 0.5  | 0.5  | 0.3                | 0.7            | 0.7  | 0.5              | 0.5  | 0.3  |
| walls   | 0.5              | 0.3  | 0.5  | 0.3  | 0.3                | 0.5            | 0.3  | 0.5              | 0.3  | 0.3  |
| working plane   | 0.2              | 0.2  | 0.2  | 0.2  | 0.2                | 0.2            | 0.2  | 0.2              | 0.2  | 0.2  |
| Room dimensions   | Viewed crosswise |      |      |      |                    | Viewed endwise |      |                  |      |      |
| x = 2H y = 2H   | 23.1             | 24.5 | 23.6 | 25.0 | 25.6               | 21.2           | 22.6 | 21.7             | 23.1 | 23.7 |
| 3H  | 25.7             | 27.0 | 26.3 | 27.5 | 28.1               | 22.8           | 24.0 | 23.3             | 24.6 | 25.2 |
| 4H  | 27.2             | 28.4 | 27.7 | 28.9 | 29.6               | 23.4           | 24.6 | 23.9             | 25.1 | 25.7 |
| 6H  | 28.8             | 29.9 | 29.4 | 30.5 | 31.2               | 23.8           | 24.9 | 24.4             | 25.5 | 26.2 |
| 8H  | 29.7             | 30.8 | 30.3 | 31.4 | 32.0               | 24.0           | 25.0 | 24.5             | 25.6 | 26.3 |
| 12H   | 30.8             | 31.8 | 31.4 | 32.4 | 33.1               | 24.0           | 25.1 | 24.6             | 25.7 | 26.4 |
| 4H 2H   | 23.6             | 24.8 | 24.2 | 25.4 | 26.0               | 22.3           | 23.5 | 22.8             | 24.0 | 24.6 |
| 3H  | 26.4             | 27.5 | 27.0 | 28.1 | 28.8               | 24.0           | 25.1 | 24.6             | 25.7 | 26.4 |
| 4H  | 28.1             | 29.0 | 28.7 | 29.6 | 30.3               | 24.8           | 25.8 | 25.5             | 26.4 | 27.1 |
| 6H  | 29.9             | 30.7 | 30.5 | 31.4 | 32.1               | 25.5           | 26.3 | 26.1             | 27.0 | 27.7 |
| 8H  | 30.9             | 31.7 | 31.6 | 32.4 | 33.1               | 25.7           | 26.5 | 26.4             | 27.2 | 27.9 |
| 12H   | 32.1             | 32.9 | 32.8 | 33.5 | 34.3               | 25.9           | 26.6 | 26.5             | 27.3 | 28.1 |
| 8H 4H   | 28.3             | 29.1 | 29.0 | 29.8 | 30.5               | 25.7           | 26.5 | 26.4             | 27.2 | 27.9 |
| 6H  | 30.4             | 31.1 | 31.1 | 31.8 | 32.6               | 26.7           | 27.3 | 27.4             | 28.0 | 28.8 |
| 8H  | 31.6             | 32.2 | 32.3 | 32.9 | 33.7               | 27.1           | 27.7 | 27.8             | 28.4 | 29.2 |
| 12H   | 33.1             | 33.6 | 33.8 | 34.3 | 35.2               | 27.5           | 28.0 | 28.2             | 28.7 | 29.5 |
| 12H 4H  | 28.3             | 29.1 | 29.0 | 29.7 | 30.5               | 26.0           | 26.7 | 26.6             | 27.4 | 28.1 |
| 6H  | 30.5             | 31.1 | 31.2 | 31.8 | 32.6               | 27.1           | 27.7 | 27.8             | 28.4 | 29.2 |
| 8H  | 31.8             | 32.3 | 32.5 | 33.0 | 33.9               | 27.7           | 28.2 | 28.4             | 29.0 | 29.8 |
| Variations with the observer position at spacings:                        |                  |      |      |      |                    |                |      |                  |      |      |
| S = 1.0H  | + 0.1 / - 0.1    |      |      |      |                    | + 0.1 / - 0.2  |      |                  |      |      |
| 1.5H  | + 0.2 / - 0.2    |      |      |      |                    | + 0.2 / - 0.3  |      |                  |      |      |
| 2.0H  | + 0.2 / - 0.3    |      |      |      |                    | + 0.2 / - 0.5  |      |                  |      |      |

CIE Pub.117, 35.32 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -11.6)

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.3520A P:8.400W PF:1.000 Freq:0Hz Lamp Flux:35.3238x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0Y24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |

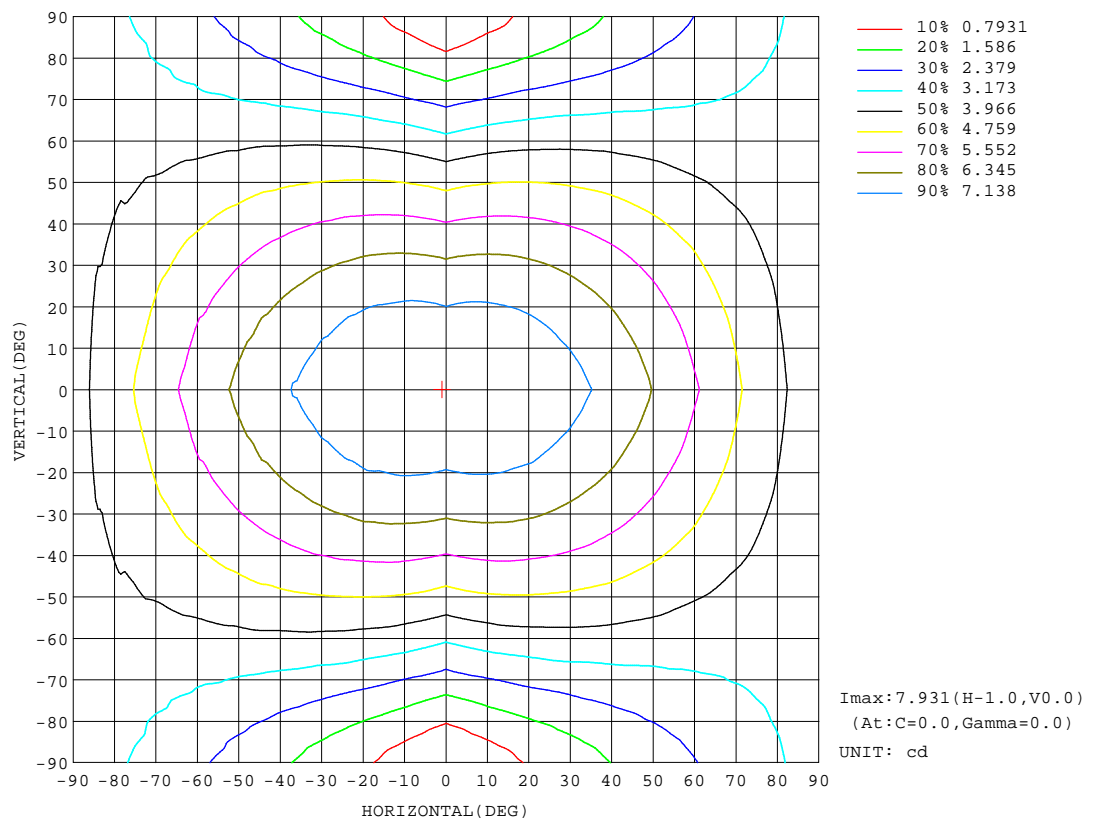
| REFLECTANCE                      |  |     |           |     |     |     |     |               |     |        |
|----------------------------------|--|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling                          | 0.8  | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 0.5 | 0.5           | 0.5 | 0      |
| Walls                            | 0.7  | 0.5 | 0.3       | 0.7 | 0.5 | 0.3 | 0.7 | 0.5           | 0.3 | 0      |
| Working plane                    | 0.2  | 0.2 | 0.2       | 0.2 | 0.2 | 0.2 | 0.2 | 0.2           | 0.2 | 0      |
| ROOM INDEX                       | UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| k = 0.60                         | 48   | 36  | 29        | 47  | 35  | 28  | 45  | 34            | 28  | 21     |
| 0.80                             | 57   | 44  | 36        | 56  | 44  | 36  | 53  | 42            | 35  | 27     |
| 1.00                             | 65   | 52  | 44        | 63  | 51  | 43  | 60  | 52            | 42  | 34     |
| 1.25                             | 72   | 60  | 51        | 70  | 58  | 50  | 65  | 56            | 49  | 39     |
| 1.50                             | 77   | 65  | 57        | 75  | 64  | 56  | 70  | 60            | 54  | 43     |
| 2.00                             | 84   | 74  | 65        | 81  | 71  | 64  | 76  | 68            | 61  | 50     |
| 2.50                             | 89   | 79  | 71        | 86  | 77  | 69  | 79  | 72            | 66  | 53     |
| 3.00                             | 93   | 84  | 76        | 89  | 81  | 74  | 82  | 76            | 70  | 57     |
| 4.00                             | 97   | 90  | 83        | 93  | 87  | 81  | 86  | 81            | 76  | 62     |
| 5.00                             | 100  | 94  | 88        | 96  | 90  | 85  | 89  | 84            | 80  | 65     |
| ROOM INDEX                       | UF(total)  |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |  |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:COLORS  
 Test Date:2019-07-01

g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.750m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.3520A P:8.400W PF:1.000 Freq:0Hz Lamp Flux:35.3238x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0Y24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

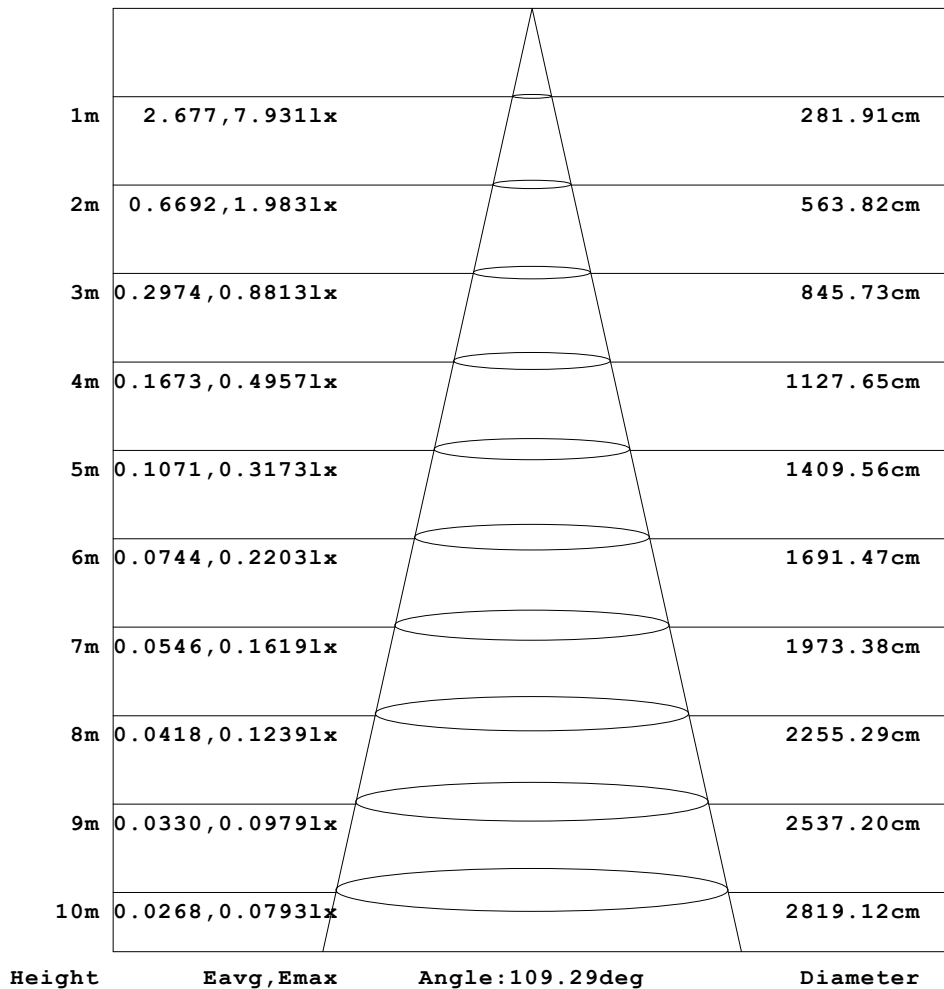
Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:



AAI Figure

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.3520A P:8.400W PF:1.000 Freq:0Hz Lamp Flux:35.3238x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0Y24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |

Flux out:17.15 lm



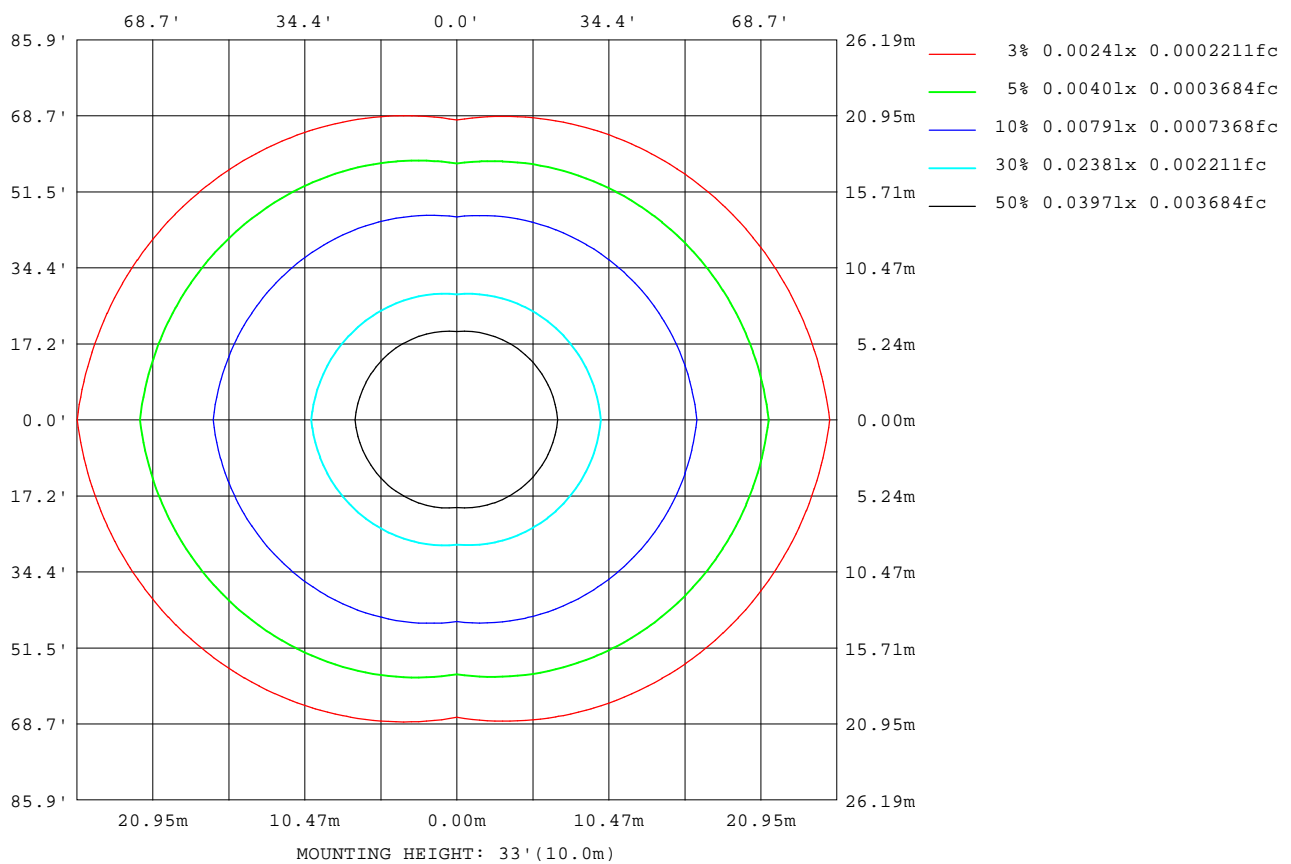
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: COLORS  
Test Date: 2019-07-01

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 10.750m [K=1.0000]  
Remarks:

## ISOLUX DIAGRAM

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.3520A P:8.400W PF:1.000 Freq:0Hz Lamp Flux:35.3238x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0Y24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: COLORS  
 Test Date: 2019-07-01

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 10.750m [K=1.0000]  
 Remarks:

### LED Avg.L Report

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.3520A P:8.400W PF:1.000 Freq:0Hz Lamp Flux:35.3238x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0Y24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |

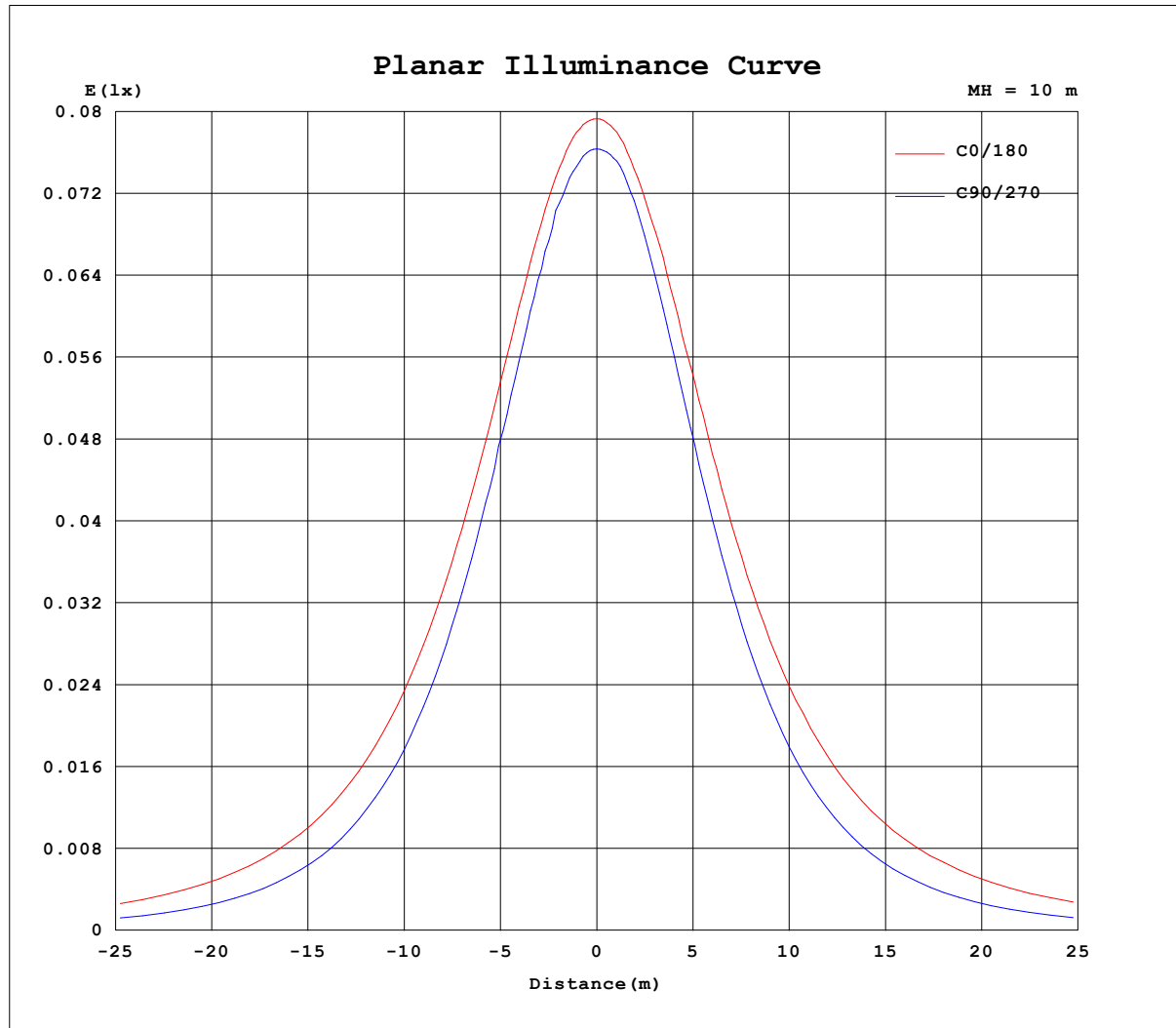
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 1065  |
| L_0~180 (75) av  | 1494  |
| L_0~180 (85) av  | 3761  |
| L_90~270 (65) av | 536   |
| L_90~270 (75) av | 468   |
| L_90~270 (85) av | 418   |
| L_45 (65) av     | 736   |
| L_45 (75) av     | 856   |
| L_45 (85) av     | 1681  |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: COLORS  
Test Date: 2019-07-01

Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 10.750m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.3520A P:8.400W PF:1.000 Freq:0Hz Lamp Flux:35.3238x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0Y24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |

Table--1

UNIT: cd

| C (DEG)<br>g (DEG) | 0    | 90   | 180  | 270  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                  | 7.93 | 7.64 | 7.93 | 7.64 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                  | 7.92 | 7.60 | 7.93 | 7.64 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                 | 7.88 | 7.52 | 7.89 | 7.55 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                 | 7.82 | 7.36 | 7.81 | 7.38 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                 | 7.69 | 7.09 | 7.74 | 7.14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                 | 7.55 | 6.77 | 7.60 | 6.83 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                 | 7.35 | 6.42 | 7.45 | 6.46 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                 | 7.15 | 6.01 | 7.23 | 6.05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                 | 6.90 | 5.52 | 7.00 | 5.58 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                 | 6.63 | 5.01 | 6.76 | 5.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                 | 6.32 | 4.49 | 6.49 | 4.54 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                 | 5.99 | 3.89 | 6.19 | 3.96 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                 | 5.62 | 3.29 | 5.85 | 3.38 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                 | 5.28 | 2.68 | 5.52 | 2.77 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                 | 4.88 | 2.03 | 5.14 | 2.12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                 | 4.49 | 1.40 | 4.79 | 1.51 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                 | 4.14 | 0.85 | 4.39 | 0.95 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                 | 3.79 | 0.38 | 4.08 | 0.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                 | 3.48 | 0.10 | 3.70 | 0.21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95                 | 3.19 | 0.01 | 3.41 | 0.02 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100                | 2.94 | 0.03 | 3.15 | 0.01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105                | 2.70 | 0.03 | 2.90 | 0.01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110                | 2.28 | 0.04 | 2.44 | 0.01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 115                | 1.96 | 0.05 | 2.16 | 0.01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120                | 1.88 | 0.05 | 2.09 | 0.01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125                | 1.67 | 0.06 | 1.85 | 0.01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 130                | 1.46 | 0.06 | 1.65 | 0.01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135                | 1.28 | 0.08 | 1.44 | 0.02 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140                | 1.11 | 0.08 | 1.23 | 0.06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145                | 0.95 | 0.10 | 1.04 | 0.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150                | 0.79 | 0.11 | 0.92 | 0.10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 155                | 0.59 | 0.11 | 0.69 | 0.11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160                | 0.44 | 0.11 | 0.58 | 0.11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 165                | 0.18 | 0.11 | 0.27 | 0.11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 170                | 0.13 | 0.11 | 0.15 | 0.10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 175                | 0.12 | 0.12 | 0.12 | 0.10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180                | 0.12 | 0.12 | 0.11 | 0.10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks: